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CANADIAN FORGINGS®

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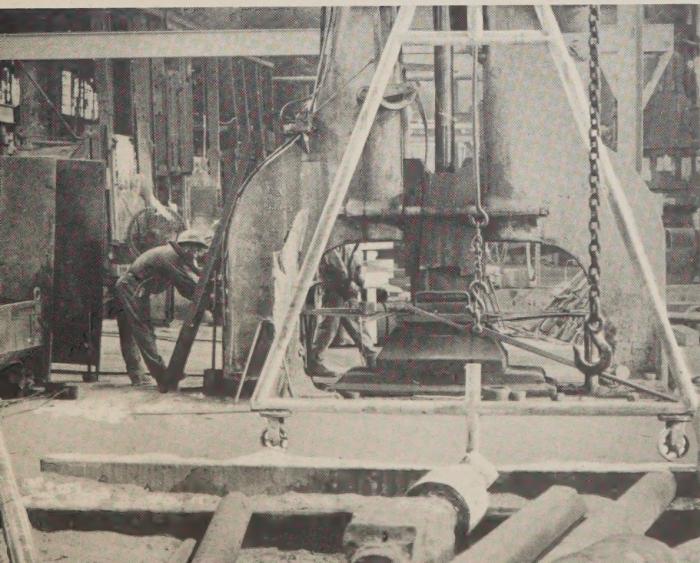
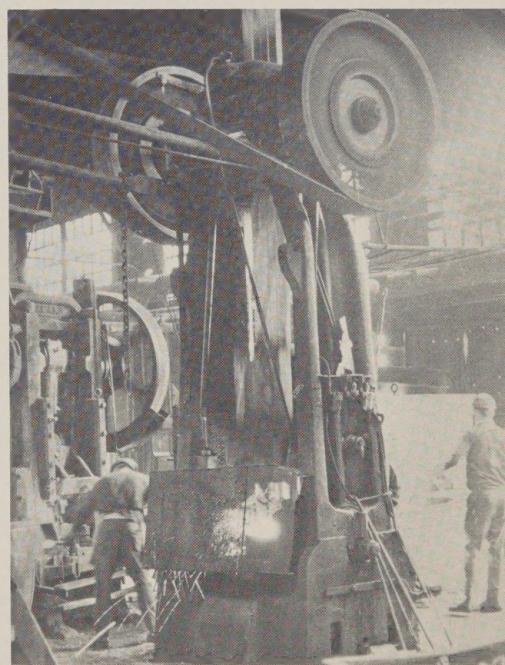
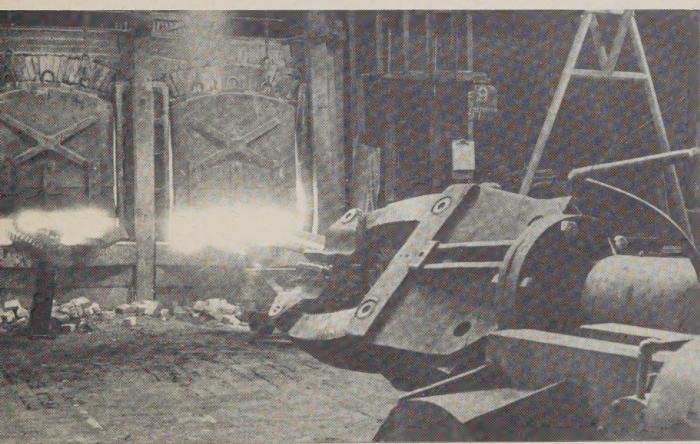
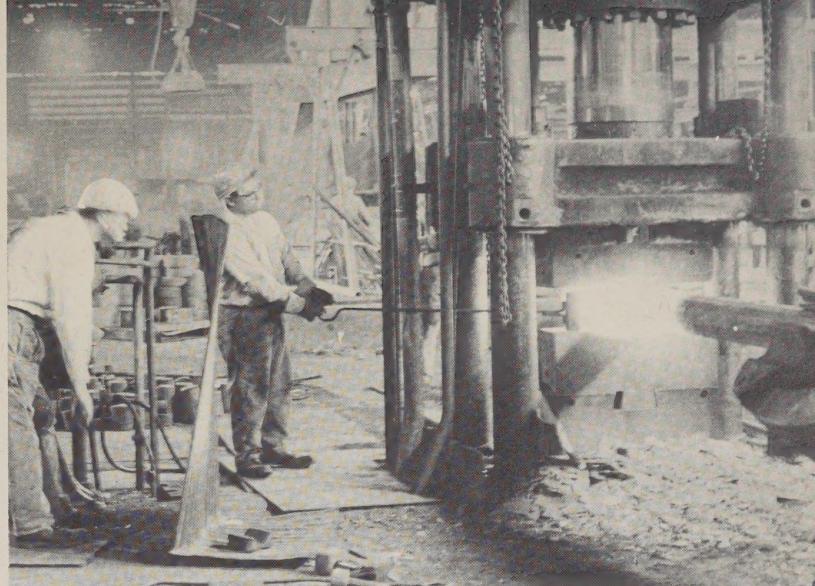
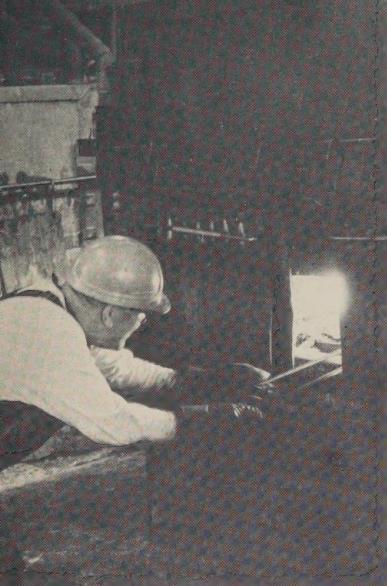
Government
Publications

CANADIAN FORGINGS

Published by authority of the Hon. Robert H. Winters, Minister of Trade and Commerce, Ottawa, Canada

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Canada's forgings industry, in both ferrous and non-ferrous divisions, is a rapidly expanding and highly diversified one. Each year it is serving more and more industries in Canada and the United States with an increasingly wide variety of forgings.

The industry has grown tremendously in the last 20 years under the impetus of Canada's general manufacturing expansion and increasing sophistication as an industrialized nation.

Modernization of methods and equipment, combined with the high quality of Canadian metals and meticulous attention to quality control, has placed Canadian forgings producers in an excellent position to serve a very large cross-section of manufacturing industries and engineering undertakings, whatever their need, wherever they may be located.

In addition to a high capability for volume production, the Canadian forgings industry has a special ability for economical, specialized short-run orders. This ability, with traditional Canadian craftsmanship, competitive pricing and firm delivery dates, will commend Canadian forgings to value-conscious buyers everywhere.

This booklet has been compiled by the Canadian Department of Trade and Commerce in co-operation with the companies listed. Its purpose is to indicate general capabilities of the Canadian forgings industry and its highly qualified technical and management personnel and thus to assist buyers to locate reliable sources of supply for their needs in both ferrous and non-ferrous metal forgings.

A reference chart at the back of this booklet shows at a glance the range of metals worked by each company. Further information on the companies is readily available at any of the 11 Canadian trade offices in the United States. These are also listed at the back of the booklet.

ATLAS STEELS COMPANY

A Division of Rio Algom
Mines Limited
Welland, Ontario

Contact: R. F. Larson
Tel: 735-5661 Area Code: 416

Atlas Steels Company is Canada's leading producer of stainless, tool and alloy steels. The company operates two fully integrated steel making plants which are completely equipped with facilities from smelting on through to finishing. Atlas produces a wide range of open die forgings in high speed, tool, alloy and stainless steel at its Welland plant. Specialty steels made by Atlas are available in sheet, plate, strip, tube, billet, bar, rod and wire forms.

Types of Forgings Produced:

Open die forgings of high speed, alloy and stainless steels

Size of Forgings:

Squares, flats, hexagons, octagons, rounds, rings, sleeves, discs, holes and special samples to a maximum 15,000 pounds

Types of Forging Equipment and Capabilities:

Open frame hammers from 750 to 12,000 pounds; 1,200-ton hydraulic press, manipulators, cranes and other handling equipment, controlled heating furnaces

Special Facilities and Services:

Complete shop facilities for machining special shapes

Heat Treating Facilities:

Complete heat treating facilities for forged bars up to 32-foot lengths on premises

Testing Facilities:

Laboratory equipment for metallographic examination, tensile, bend, hardness, impact, magnaflux, ultrasonic and dye penetrant; a complete chemical laboratory on premises

PLANT LOCATION

Atlas Steels Company
Welland, Ontario
Tel: 735-5661
Area Code: 416

CANADA FOUNDRIES & FORGINGS LTD.

Welland, Ontario

Contact: A. L. Dean
Tel: 735-1220 Area Code: 416

Canada Foundries & Forgings Ltd. has been in operation for more than 50 years. It was formed in 1912 from the merger of a manufacturing concern started in 1854, a heavy forging company founded in 1906 and a closed die forging plant started in 1907. Reorganized in 1964, the company has since concentrated exclusively on forgings and has a continuing program of modernization of processes and equipment under way in both the heavy forge and drop forge operations.

Types of forgings produced:

HEAVY FORGINGS: marine shafting, locomotive axles, crankshafts, crane hooks, roll-forged rings, heavy engineering and maintenance forgings—all in carbon or alloy, stainless or special quality steels. Rings in all steel grades (including stainless), titanium and aluminum alloys, bronze and copper

CLOSED DIE FORGINGS: for defense industries; automotive, agricultural, aircraft, valve body; general jobbing forgings in carbon and alloy steels, titanium alloys, copper and bronze

Size of forgings:

HEAVY FORGINGS: to a maximum piece weight of 25 tons, maximum length, 50 feet with shaft collar maximum diameter 37 inches. Roll-forged rings up to 84-inch diameter and maximum weight 6,500 pounds

CLOSED DIE FORGINGS: to 60 pounds, 24-inch maximum length

Types of forging equipment and capabilities:

HEAVY FORGINGS: U-frame hammers, from 4,000 to 8,000 pounds; open frame hammers, 500 and 1,500 pounds; presses, 500 to 1,000 tons; ring rolling mill to 84 inches diameter.

CLOSED DIE FORGINGS: Steam drop hammers, 2,500 to 5,000 pounds, board drop hammers, 500 to 2,500 pounds, 2-inch Ajax upsetters. Gas-fired furnaces in both plants

Special facilities and services:

In heavy forging plant: rough machining and limited finish machining on lathes and vertical lathes; trepanning up to 20-inch maximum diameter and 50 feet in length.

In closed die plant: die sinking and forging design services

Heat treating facilities:

Complete facilities in both plants. 50-foot car-type furnaces, continuous quench and draw; batch-type furnaces on premises

Testing equipment:

Laboratory equipment for metallographic, tensile, bend, ultrasonic, magnetic particle impact and other modern inspection equipment on premises

PLANT LOCATIONS

Canada Foundries & Forgings Ltd.
Canada Forge Plant
Empire Street
Welland, Ontario

Canada Foundries & Forgings Ltd.
Drop Forge Plant
Major Street
Welland, Ontario
Tel: 735-1220
Area Code: 416

THE CANADA METAL COMPANY LIMITED

Forging Division
32 Upton Road
Scarborough, Ontario

Contact: Alfred E. Schubert
Tel: 755-5247 Area Code: 416

The Canada Metal Company Limited has supplied many types of non-ferrous metals to all segments of private industry and governments in Canada for some 60 years. Incorporated in 1906, the company is recognized as a leader in the non-ferrous metals field. With head office in Toronto, the company has branch offices and other plants at Montreal, Winnipeg, Calgary and Vancouver. Formed in 1951, the Forging Division, which is located at Scarborough in the Toronto area, concentrates primarily on copper base forgings and has a secondary interest in aluminum forgings.

Types of Forgings Produced:

Primarily copper base—for all classes of industry including automotive, railroads, compressed gases, electrical, heating and for defense purposes

Size of Forgings:

10 pounds in copper base, to maximum diameter 6 inches and maximum height 6 inches

Types of Forging Equipment and Capacities:

2 percussion screw hammers of 250 tons. 13 presses ranging up to 300 tons capacity. Gas-fired preheating equipment

Special Facilities and Services:

Fully-equipped production machining facilities and tool room with die sinking

Heat Treating Facilities:

Complete services available nearby

Testing Facilities:

Complete services available nearby

PLANT LOCATION

The Canada Metal Company Limited
Forging Division
32 Upton Road
Scarborough, Ontario
Tel: 755-5247
Area Code: 416

CANADIAN WARREN PINK

Division of Dominion Chain Company Limited
Carlton Street
St. Catharines, Ontario

Contact: J. W. Fraser
Tel: 273-0840 Area Code: 519

Canadian Warren Pink, founded in 1866, is now a division of Dominion Chain Company Limited. A leading Canadian producer of chain and wire rope fittings, the company also produces pole line hardware and forgings for the automotive, transportation and construction industries. Originally a producer of logging tools, Canadian Warren Pink is still engaged in this field. Enquiries for special tools and fittings and custom forging services are welcomed.

Types of Forgings Produced:

Closed impression die forgings for chain, wire rope, construction, pole line, automotive, logging, pulp and paper, railroad and marine industries

Size of Forgings:

To 10 pounds

Types of Forging Equipment and Capacities:

Board hammers to 2,000 pounds, forging press to 750 tons, upsetter to 2 inches, gas and oil fired furnaces

Special Facilities and Services:

Forging design and engineering consultation, drilling, threading, tapping, grinding, tumbling, shotblasting, painting, galvanizing and electroplating

Heat Treating Facilities:

Normalizing, annealing, carburizing, heat treating, tempering and controlled atmosphere available at parent company and nearby

Testing Facilities:

Hardness testing on premises. Tensile testing nearby

PLANT LOCATIONS

Canadian Warren Pink
Carlton Street
St. Catharines, Ontario
Tel: 273-0840
Area Code: 519

Canadian Warren Pink
Third Avenue West
Vancouver, British Columbia
Tel: 876-2535
Area Code: 604

COLUMBUS MCKINNON LTD.

580 Welland Avenue East

Box 668

St. Catharines, Ontario

Contact: E. Kennard

Tel: 682-2661 Area Code: 416

Columbus McKinnon Ltd. has continued to expand and modernize its facilities since it was established in the mid-1870's as a family business. With 150,000 square feet of floor space in a new factory, the company is in an excellent position to supply automotive forgings where runs are short and tooling on forging presses is not warranted. Noted in Canada and the United States as major chain and hoist manufacturers, the company supplies a range of hoist components to Canadian and United States plants as well as railroad and marine forgings.

Types of Forgings Produced:

Mostly hoist components for Canadian and United States plants. Also specializes in short runs for automotive forgings, railroad and marine forgings

Size of Forgings:

From a few ounces to 12 pounds

Types of Forging Equipment and Capacities:

Board hammers from 1,500 to 3,000 pounds. Additional 4-5,000 pounds projected. Presses: trimming to 100 tons; general-purpose to 200 tons; cold-forging and coining to 250 tons. Gas-fired, atmosphere-controlled furnaces

Special Facilities and Services:

Product engineering department; die-sinking; turret and automatic lathes; pickling, shot-blasting, tumbling, painting

Heat Treating Facilities:

Modern automatically controlled furnaces for annealing, heating, quenching, carburizing and salt bath on premises

Testing Facilities:

Laboratory equipment for tensile, bend, hardness, Izod and magnaflux on premises

PLANT LOCATION

Columbus McKinnon Ltd.

580 Welland Avenue East

St. Catharines, Ontario

Tel: 682-2661

Area Code: 416

CRUCIBLE STEEL OF CANADA LTD.

Sorel, Quebec

Contact: F. W. Hore
Tel: 743-7931 Area Code: 514

Crucible Steel of Canada Ltd., formed in 1959, is a highly dependable Canadian producer of carbon and alloy custom forgings, die steels and hot work steels. Maintaining a high standard of quality, Crucible Steel has won increasing acceptance for its products and service in a number of countries outside North America. This enterprising Canadian company specializes in producing open die forgings to customer specifications and requirements. Supporting the well-equipped modern plant of Crucible Steel at Sorel—45 miles east of Montreal—are sales offices in Montreal and Toronto and a warehouse in Toronto.

Types of Forgings Produced:

Open die forgings to custom specifications in tool, carbon, alloy and stainless steels

Size of Forgings:

From 4 inches round or square, maximum weight about 4,000 pounds

Types of Forging Equipment and Capacities:

13,000-pound airhammer, hydraulic presses 2,000 to 5,000 tons. Gas-fired, automatic, open-flame, car bottom type furnace

Special Facilities and Services:

Conventional rough machining

Heat Treating Facilities:

Electrical vertical pit and gas-fired horizontal furnaces on premises

Testing Facilities:

Complete service for physical testing available nearby

PLANT LOCATION

Crucible Steel of Canada Ltd.
Sorel, Quebec
Tel: 743-7931
Area Code: 514

DOMINION FORGE COMPANY

A Division of Canadian Corporate
Management Company Limited
2480 Seminole Street
Windsor, Ontario

Contact: R. T. Herdegen Jr.
Tel: 254-7545 Area Code: 519

Dominion Forge Company, founded in 1910 to serve the automotive industry, now supplies virtually every major company in nearly every major Canadian industry that has a need for forgings. With a wide range of modern equipment and testing facilities that is constantly updated, the company produces a wide variety of closed die forgings in steel, stainless steel and high temperature alloys. Markets include petrochemicals, mining and agricultural equipment industries, rail car builders, aviation, missile and other defense manufacturers. A substantial and growing share of the company's output reaches a wide range of industries around the world.

Types of Forgings Produced:

Closed die forgings of steel, stainless steel and high temperature alloys for all types of industry including defense industries

Size of Forgings:

Wide variety of shapes, $\frac{1}{2}$ pound to 150 pounds, to 5 feet long

Types of Forging Equipment and Capacities:

Board drop and steam hammers to 15,000 pounds, mechanical presses to 2,000 tons, hydraulic presses to 400 tons, upsetters to 6 inches, forging rolls, cold header. Oil-fired, temperature-controlled furnaces, resistance heaters

Special Facilities and Services:

Complete die sinking facilities, forging design services

Heat Treating Facilities:

Modern continuous and batch-type furnaces for annealing, normalizing, quenching in various media, and tempering on premises

Testing Facilities:

Laboratory facilities for wet testing, micro-photography, tensile and impact testing, magnetic particle inspection, production and hardness testing on premises

PLANT LOCATION

Dominion Forge Company
2480 Seminole Street
Windsor, Ontario
Tel: 254-7545
Area Code: 519

GENERAL DIE & MACHINE CO. LIMITED

Major and Harold Streets
Welland, Ontario

Contact: J. L. Paterson
Tel: 734-7455 Area Code: 416

General Die & Machine Co. Limited, incorporated in 1946, has established itself as a leading Canadian producer of forgings for a broad range of industry. Complete diversification is a feature of the company enabling it to supply practically any industry using drop forgings, especially where short runs are involved. A high standard of quality and service is maintained by highly qualified personnel. Using the newest and most advanced techniques, the company has won an outstanding reputation for its products.

Types of forgings produced:

Automotive, marine, railroad, pole line hardware, agricultural, mining and other forgings from ferrous and non-ferrous materials

Size of forgings:

1/4 ounce to 100 pounds

Types of forging equipment and capacities:

Board hammers from 1,200 to 6,000 pounds, mechanical presses, 1-2 inch upsetters. No pre-heating

Special facilities and services:

Die sinking; product machining

Heat treating facilities:

Available nearby

Testing facilities:

Rockwell, magnaflux, chemical analysis, pull test nearby

PLANT LOCATION

General Die & Machine Co. Limited
Major and Harold Streets
Welland, Ontario
Tel: 734-7455
Area Code: 416

HAUN DROP FORGE CO., LIMITED

Division of Gray Forgings and Stampings Limited
P.O. Box 98
Welland, Ontario

Contact: Jack Haun
Tel: 732-4934 Area Code: 416

Haun Drop Forge Co., Limited was formed in 1937 to produce forgings for the extensive range of mechanics' hand tools manufactured by Gray Forgings and distributed by Gray Tool Co. of Canada. With growth of the parent company's world-wide business, the Haun company also expanded and diversified into the commercial forgings field. The company has now been supplying commercial forgings of many types to Canadian and United States industry for more than 20 years.

Types of forgings produced:

Mechanics' hand tools and commercial forgings of all types in carbon and alloy steels

Size of forgings:

½ ounce to 15 pounds

Types of Forging Equipment and Capacities:

Board hammers 1,000 to 3,000 pounds, Bradley hammer, mechanical presses 30 to 400 tons, reduce rolls. Oil-fired, manual-control furnaces

Special Facilities and Services:

Equipped to produce all dies and tools used in own production

Heat Treating Facilities:

Electric batch-type normalizing furnaces on premises

Testing Facilities:

Brinnell and magnaflux on premises. Other facilities nearby

PLANT LOCATION

Haun Drop Forge Co., Limited
Major and Schofield Avenues
Welland, Ontario
Tel: 732-4934
Area Code: 416

HAWKER SIDDELEY CANADA LTD.

Forging Division
P.O. Box 160
Montreal, Quebec

Contact: L. F. Steward
Tel: 482-8610 Area Code: 514

Hawker Siddeley Canada Ltd., with a plant that has been in continuous operation since 1876, brings a wealth and depth of experience to the highly specialized forgings field. Employing 1,800 in total factory space of more than 1,000,000 square feet, the company produces all types of open die ferrous forgings, large, medium and small, on an impressive range of modern equipment. Included in this equipment is Canada's largest press (of 7,000 tons capacity) and 18 heat treatment furnaces fitted with fully automatic control systems. The machine shop for rough and finish machining includes a lathe large enough to accommodate shafts up to 65 feet in length while the plant forges ingots up to 80 tons.

Types of Forgings Produced:

Wide variety of large, medium and small ferrous forgings —marine shafting, turbine and generator shafts, forgings for pulp and paper industry, steel mills

Size of Forgings:

Ingots to 80 tons. Maximum for rough forging, 95,000 pounds; machined, 75,000 pounds (depending on dimensions). Can machine up to 120 inches diameter and bore up to 62 feet long

Types of Forging Equipment and Capacities:

2,000 to 10,000-pound general purpose hammers, 8,000-pound axle forging hammer, other smaller hammers, 7,000-ton hydraulic press with 10-foot stroke and 17½ feet clearance between columns, other hydraulic and mechanical presses of varying capacities

Special Facilities and Services:

Bulldozers, boring mills, drills, grinders, lathes, shot blast welders, threaders, milling machines

Heat Treating Facilities:

Electric and oil-fired furnaces ranging down from 15 feet wide, 15 feet high and 75 feet long on premises

Testing Facilities:

Laboratory equipment for tensile, bend, hardness, impact, ultrasonic, magnetic particle, dye penetrant and boroscopic on premises

PLANT LOCATION

Hawker Siddeley Canada Ltd.
Trenton, Nova Scotia

JOHNSON MATTHEY & MALLORY LIMITED

Foundry Division
16 Smith Street
St. Catharines, Ontario

Contact: John Allan
Tel: 682-9258 Area Code: 416

Johnson Matthey & Mallory Limited, the Canadian arm of a worldwide organization founded in Britain in 1812, operates a non-ferrous foundry and forgings plant that has been in successful operation since 1905. Forgings were introduced in 1954. Prior to that year only sand castings were produced. Formerly the St. Catharines Brass Works, the Foundry Division of Johnson Matthey & Mallory Limited is housed in a modern factory with the latest equipment. Capable management, stringent quality control and superior machining and finishing techniques combine to ensure forged non-ferrous products of the highest reliability.

Types of Forgings Produced:

Seam welding wheels, shafts and bars for resistance welding applications; aluminum bronze discs and rectangles for railroad and machine tool applications

Size of Forgings:

5 to 500 pounds

Types of Forging Equipment and Capacities:

6B and 7B Nzel open face hammers. Oil fired and electric element recirculating furnaces, automatically controlled

Special Facilities and Services:

Product machining and finishing

Heat Treating Facilities:

Annealing and precipitation hardening of non-ferrous and RWMA alloys on premises

Testing Facilities:

Laboratory equipment for hardness checking and instantaneous electrical conductivity checking on premises. Other facilities available at parent plant, 110 Industry St., Toronto

PLANT LOCATIONS

Johnson Matthey & Mallory Limited
110 Industry Street
Toronto 15, Ontario
Tel: 763-5111
Area Code: 416

Johnson Matthey & Mallory Limited
Foundry Division
16 Smith Street
St. Catharines, Ontario
Tel: 682-9258
Area Code: 416

LACAL INDUSTRIES LIMITED

65 St. Joseph Street
Lachine, Quebec

Contact: G. D. Zimmerman
Tel: 233-6261 Area Code: 416

Lacal Industries Limited, long a major supplier of pole line hardware in Canada, entered the forging field in 1964 with acquisition of the Industrial and Pole Line Hardware Division of Hayes Steel Products Limited. On moving these operations into its own plant, Lacal merged them with additional heat treating, die sinking and ancillary equipment to give a facility capable of producing quality forgings in aluminum and steel primarily for the electrical industry. In the two years since, the high quality of the company's production and service has enabled it to diversify into the specialty hardware, automotive and farm equipment fields. A sales office is maintained in Toronto.

Types of Forgings Produced:

Pole line, industrial, naval and specialty hardware; automotive and farm implement forgings—in aluminum and steel

Size of Forgings:

To 15 pounds in steel, to 10 pounds in aluminum

Types of Forging Equipment and Capacities:

1,500 to 3,000-pound Ceco air drop hammers, Bradley and Nazel hammers, 1 and 2 inch upsetters, mechanical presses, 100 to 400 tons. Automatically controlled gas-fired box type furnaces, electric box type furnace

Special Facilities and Services:

Die making and machining services including production lathes, vertical and straddle mills, tapping and threading facilities and shot blasting equipment

Heat Treating Facilities:

Electric box furnace and gas-fired semi-automatic batch furnace on premises

Testing Facilities:

Olsen pull tester, Rockwell hardness tester on premises. Other facilities available nearby

PLANT LOCATION

Lacal Industries Limited
65 St. Joseph Street
Lachine, Quebec

LISTER BOLT & CHAIN WORKS LTD.

301 West Fifth Avenue
Vancouver 10, British Columbia

Contact: Norman McCaskell
Tel: 874-5294 Area Code: 604

Lister Bolt & Chain Works Ltd. produces pole line hardware and custom forgings for a wide range of industrial applications. Started in 1911 as a blacksmith shop, the company added chain making in the 1920's and bolt making in the 1930's. In steady growth since then, the company has expanded its bolt making production and added facilities for upset, hammer and closed die forgings. In the second world war, the company was a major contributor to the British Columbia shipbuilding industries.

Types of forgings produced:

Pole line hardware, custom forgings for a wide range of industrial applications

Size of forgings:

Upset forgings to 2 inches diameter, hammer forgings to 4 inches square, closed die forgings to 6 inches diameter, 7-8 pounds

Types of Forging Equipment and Capacities:

Hammers to 500 pounds, chain hammers, 300-ton hydraulic press, 750-ton mechanical forging press, trimming press, upsetters. Gas-fired furnaces with limited atmospheric control

Special Facilities and Services:

Die work

Heat Treating Facilities:

Available nearby

Testing Facilities:

Tensile testing to 500,000 pounds on premises

PLANT LOCATION

Lister Bolt & Chain Works Ltd.
301 West Fifth Avenue
Vancouver 10, British Columbia
Tel: 874-5294
Area Code: 604

LOFTHOUSE BRASS MFG. LTD.

310 Hopkins Street
Whitby, Ontario

Contact: George E. Lofthouse
Tel: 668-4951 Area Code: 416

Lofthouse Brass Mfg. Ltd., founded in 1957, specializes in cored forgings, producing parts for the electrical, electronic, gas, plumbing and agricultural industries to a degree of finish that requires a minimum of subsequent machining. With most of its production initially on a custom basis, the company designs and builds all tooling required and offers a die and product design service.

Types of Forgings Produced:

Brass forgings for electrical, plumbing, agricultural, electronic and gas industries

Size of Forgings:

Approximately 2 pounds

Types of Forging Equipment and Capacities:

Mechanical presses 40 to 100 tons. Gas-fired, hopper-fed billet furnaces

Special Facilities and Services:

Complete machining of parts, die and product design, die making

Heat Treating Facilities:

Available nearby

Testing Facilities:

Complete services for physical testing nearby

PLANT LOCATION

Lofthouse Brass Mfg. Ltd.
310 Hopkins Street
Whitby, Ontario
Tel: 668-4951
Area Code: 416

SLATER STEEL INDUSTRIES LIMITED

N. Slater Company Division

Burlington Steel Company Division

Hamilton, Ontario

Contact: W. F. Corkran

Tel: 528-8888 Area Code: 416

Slater Steel Industries Limited resulted from the merger in 1962 of two Canadian companies which were leaders in their respective (and complementary) fields: N. Slater Company, specializing in pole line hardware, and Burlington Steel Company, a producer of quality rolled steel products. The result is a highly efficient organization with capacity to serve the electrical power, communications, automotive, and railroad industries with high quality ferrous forgings and forged steel mill grinding balls. N. Slater, in addition to its pole line hardware, offers a custom manufacturing service which includes product and tool design, forging, deep drawing, stamping, aluminum alloy casting, hot-dip galvanizing and other processes.

Types of forgings produced:

Ferrous—automotive, railroad, pole line hardware, grinding balls, extra high voltage electrical transmission hardware

Size of forgings:

To 5 pounds

Types of forging equipment and capacities:

Board hammers to 2,000 pounds, 700-ton mechanical presses, upsetters to 2 inches. Oil and gas-fired atmosphere furnace, induction heating

Special facilities and services:

General tool room, including die sinking, production turning, milling, drilling, tapping, threading, grinding; hot dip galvanizing and painting; product design

Heat treating facilities:

Batch-type gas furnaces for heat treating, tempering and annealing. Galvanizing on premises

Testing facilities:

Complete modern physical laboratories for physical and metallurgical examinations; spectrochemical equipment including spectrophotometers and optical emission vacuum spectrometer on premises

PLANT LOCATION

Slater Steel Industries Limited

N. Slater Company Division

Burlington Steel Company Division

Hamilton, Ontario

Tel: 528-8888

Area Code: 416

THE STEEL COMPANY OF CANADA, LIMITED

Drop Forged Products
Gananoque Works
Gananoque, Ontario

Contact: C. L. Farquhar
Tel: 382-2185 Area Code: 613

The Steel Company of Canada, Limited—Canada's largest producer of steel—is a major supplier of drop forgings to the agricultural, automotive and railway industries and to a wide range of industries generally. The Stelco drop forging plant—one of 20 steel and steel products plants operated by the company—has been in continuous operation since 1870 and is equipped with some of the most modern facilities in its field. The plant, strategically located midway between Montreal and Toronto, is served by all major trucking companies and the mainline service of the Canadian National Railways. The company is thus in an excellent position to serve customers in the main North American industrial markets.

Types of Forgings Produced:

Agricultural, automotive, railway, shipbuilding, petrochemical industry, tank and plumbing manufacturers, electrical and conveyor industries

Size of Forgings:

From ounces to 70 pounds; new equipment will produce up to 100 pounds

Types of Forging Equipment and Capacities:

Air-operated and board drop gravity hammers from 1,500 to 5,000 pounds; hot and cold trim presses, mechanical coining press, medium size forging roll. Oil and gas-fired, rotary and slot-type automatically controlled furnaces

Special Facilities and Services:

Closed die milling and electrical discharge die sinking equipment

Heat Treating Facilities:

Linberg normalizing furnaces on premises; continuous hardening and tempering furnaces at associated plant

Testing Facilities:

Magnaglo, hardness checking and special weighing equipment on premises

PLANT LOCATION

The Steel Company of Canada, Limited
Drop Forged Products
Gananoque Works
River Street
Gananoque, Ontario
Tel: 382-2185
Area Code: 613

THOMPSON PRODUCTS, LIMITED

230 Louth Street
St. Catharines, Ontario

Contact: R. J. Twaddle
Tel: 685-8411 Area Code: 416

Thompson Products, Limited, a subsidiary of TRW Inc., is a major Canadian supplier to the automotive, aircraft, mining and construction industries. In continuous operation since 1929, the company now employs 1,500 people in a modern factory of 400,000 square feet with a full range of the latest equipment. In addition, the company maintains warehouses in seven major cities to give quick service to the automotive aftermarket. An integrated forging, casting and machining facility is supported by comprehensive quality control and metallurgical laboratory services to ensure maintenance of rigid quality standards in all Thompson products.

Types of Forgings Produced:

Automotive valves, pitmans, idlers, sockets, center links, steering arms and wheel spindles, mining drill rods and bits (ferrous) also military and commercial forgings (ferrous and non-ferrous)

Size of Forgings:

To 15 pounds and 60 square inches of projected area

Types of Forging Equipment and Capacities:

700 to 2,500-ton mechanical forging presses, 1,000-ton hydraulic forging press, presses from 50 to 1,000 tons for blanking, forming, trimming, shearing and other purposes, 1½ to 3-inch upsetters, reduce rolls, extrusion machines with automated straightening, drawing and shearing equipment. Induction heating equipment (3,400 kva installed capacity), gas-fired rotary furnace, electronic controls

Special Facilities and Services:

Extensive tool room facilities, complete range of product machining and finishing facilities supported by quality control, production and industrial engineering departments

Heat Treating Facilities:

Hardening, tempering, annealing, carburizing, carbo-nitriding and clean hardening on premises

Testing Facilities:

Laboratory equipment for tensile, bend, hardness, impact, ultrasonic, magnetic particle, dye penetrant and boro-scopic on premises. Also X-rays and chemical facilities (wet and dry) on premises

PLANT LOCATION

Thompson Products, Limited
230 Louth Street
St. Catharines, Ontario
Tel: 685-8411
Area Code: 416

WALLACEBURG-SINGER LTD.

Libby Street
Wallaceburg, Ontario

Contact: R. McLellan
Tel: 627-3361 Area Code: 519

Wallaceburg-Singer Ltd. is one of a group of four companies making up Wallaceburg Brass Limited, a leading specialist in brass since 1905. Formed in 1953 to complement the facilities of associated companies, Wallaceburg-Singer produces cored and solid non-ferrous forgings and serves a wide range of industry throughout Canada and much of the United States. Constant additions to the forging press and other equipment keep the facility fully up-to-date.

Types of Forgings Produced:

Brass, bronze, copper and aluminum for manufacturers of plumbing valves, pump impellers, fire extinguishers, water hydrants, railroad air brakes, high-pressure valves and regulators and related equipment

Size of Forgings:

To 10 pounds

Types of Forging Equipment and Capacities:

Crank, vise and friction presses to 800 tons, complete machining facilities, gas-fired, thermostatically controlled furnaces

Special Facilities and Services:

Die design and die sinking, product machining and plating

Heat Treating Facilities:

None

Testing Facilities:

Laboratory facilities for metal and chemical analysis on all types of metals on premises

PLANT LOCATION

Wallaceburg-Singer Ltd.
Libby Street
Wallaceburg, Ontario
Tel: 627-3361
Area Code: 519

WHITEHOUSE FASTENINGS LIMITED

165 Rue Gravelines
St. Laurent, Quebec

Contact: S. Eric Petersen
Tel: 636-1326 Area Code: 514

Whitehouse Fastenings Limited was founded in 1895 to supply metal-working and screw products to industry generally. The company has since specialized in off-standard and special fastenings of stainless steel and non-ferrous metals which it sells direct to industries where corrosion is a factor. The product list includes bolts, nuts, screws, washers, rivets and pins. The company is well equipped to produce oversize bolts and screw products.

Types of Forgings Produced:

Standard, off-standard and special fastenings of stainless steel and non-ferrous metals for industries where corrosion is a factor

Size of Forgings:

Wire or rod diameters from $\frac{1}{4}$ inch to $1\frac{1}{4}$ inches; hexagon and square head, plow and flat head cap screws in lengths $1\frac{1}{2}$ inches to 12 feet

Types of Forging Equipment and Capacities:

Hot upsetter, associated pickling baths. Gas-fired ovens, electrically-controlled between 1,200 and 2,300°F

Special Facilities and Services:

Engine and turret lathes, automatic screw machines, punch presses, nut tappers, bolt threaders

Heat Treating Facilities:

None

Testing Facilities:

Gauges on premises sufficient for maintaining high quality of workmanship

PLANT LOCATION

Whitehouse Fastenings Limited
165 Rue Gravelines
St. Laurent, Quebec
Tel: 636-1326
Area Code: 514

	STEELS								NON-FERROUS					
	Page Number	CARBON	ALLOY	HIGH SPEED	HIGH TEMPERATURE	STAINLESS	TOOL	SPECIAL	GRINDING BALLS	TITANIUM	ALUMINUM	COPPER BASE	BRASS	BRONZE
Atlas Steels Company A Division of Rio Algom Mines Limited	5		●	●		●	●							
Canada Foundries & Forgings Ltd.	6	●	●			●	●	●		●	●	●		●
The Canada Metal Company Limited Forging Division	7											●		
Canadian Warren Pink Division of Dominion Chain Company Limited	8	●	●			●		●						
Columbus McKinnon Ltd.	9	●	●					●						
Crucible Steel of Canada Ltd.	10	●	●			●	●							
Dominion Forge Company A Division of Canadian Corporate Management Company Limited	11	●	●		●	●								
General Die & Machine Co. Limited	12	●	●								●	●	●	
Haun Drop Forge Co. Limited Division of Gray Forgings & Stampings Limited	13	●	●											
Hawker Siddeley Canada Ltd. Forging Division	14	●	●					●						
Johnson Matthey & Mallory Limited Foundry Division	15									●			●	
Lacal Industries Limited	16	●	●								●			
Lister Bolt & Chain Works Ltd.	17	●	●			●		●						
Lofthouse Brass Mfg. Ltd.	18												●	
Slater Steel Industries Limited N. Slater Company Division Burlington Steel Company Division	19	●	●					●	●					
The Steel Company of Canada, Limited Drop Forge Division	20	●	●											
Thompson Products, Limited	21	●	●				●	●		●	●			
Wallaceburg-Singer Ltd.	22									●	●	●	●	
Whitehouse Fastenings Limited	23	●	●		●	●		●		●	●	●	●	

CANADIAN TRADE OFFICES IN THE UNITED STATES

BOSTON

Consul and Senior Trade Commissioner
Canadian Consulate General
607 Boylston Street
Boston, Massachusetts 02116
Tel: 262-3760 (Area Code 617)

CHICAGO

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Canadian Consulate General
310 South Michigan Avenue
Suite 2000
Chicago, Illinois 60604
Tel: 427-7926 (Area Code 312)

CLEVELAND

Consul and Senior Trade Commissioner
Canadian Consulate
Illuminating Building
55 Public Square
Cleveland, Ohio 44113
Tel: 861-1660 (Area Code 216)

DETROIT

Consul and Trade Commissioner
Canadian Consulate
1139 Penobscot Building
Detroit, Michigan 48226
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3 Penn Center Plaza
Philadelphia, Pennsylvania 19102
Tel: LOCust 3-5838 (Area Code 215)

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Canadian Consulate General
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